



## Feed the Future Country Fact Sheet

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# Mushroom Farming Means Opportunity and Better Nutrition in Tanzania

Delphina Peter Mamiro is mad about mushrooms.

This senior lecturer at Tanzania's Sokoine University of Agriculture is convinced that local farmers can learn to profitably produce oyster mushrooms in order to improve their household nutrition and generate income for their families. One of 390 African women scientists to win a fellowship from [African Women in Agricultural Research and Development](#), a program supported by Feed the Future and the Bill & Melinda Gates Foundation, Dr. Mamiro is helping advance food security in Tanzania by focusing her research and field work on a nutritious and high-value crop traditionally harvested by women.

"Mushrooms have no cholesterol and are full of nutrients and vitamins," says Mamiro, who holds a PhD in plant pathology from Pennsylvania State University. "In just 28 days, women can have a crop of oyster mushrooms from which they can make a popular relish."

During the dry season when vegetables are scarce, women and children collect wild edible mushrooms and preserve them for future use.

"Mushroom gathering can be dangerous due to snake attacks and the risk of collecting poisonous varieties by mistake. Growing them at home is the solution to these hazards," says Mamiro, who is training groups of local women, men and young people in Tanzania to cultivate and dry oyster mushrooms on their own small plots of land. They use agricultural waste, such as banana leaves, as a base for the mushrooms to grow and environmentally friendly recycled plastic bags for containers.

"Tanzania's tropical climate is perfect for mushroom production and they can be grown all year round, creating employment, health and wealth," says Mamiro. She reports that production is, well, mushrooming in popularity, albeit slowly.

"Some households now prefer mushrooms because awareness about their nutritional benefits is growing," she says. Several farmers in her test groups are selling surplus mushrooms and using the profits for school fees and medicine.

One constraint to expanding mushroom production is that good quality spawn (i.e. the vegetative part of a fungus that allows mushrooms to grow) is not widely available in Tanzania, and smallholder farmers need more training in the full spectrum of mushroom cultivation for the industry to gain traction and become sustainable.

"Untrained farmers are under-producing or incurring high costs for unnecessary inputs, such as industrial fertilizer," explains Mamiro, who hopes to help them solve these problems.

Despite the challenges, Mamiro is encouraged by the farmers' progress. "I'm happiest when I see a woman with a basket of mushrooms and children in the household out playing because their stomachs are full of food," she says.

[Watch a video](#) of Dr. Mamiro discussing her research. This article was submitted by AWARD Communications Manager Karen Homer.